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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,679	01/08/2002	Rita Lorena Salazar-Leal	214314US30	9035
22850	7590	12/14/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SMALLEY, JAMES N	
			ART UNIT 3727	PAPER NUMBER

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/038,679	Applicant(s) SALAZAR-LEAL, RITA LORENA	
	Examiner James N Smalley	Art Unit 3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-14 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-14 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24-25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim s 24-25 recites the limitation "thermochromic ink" in the second line of each claim. There is insufficient antecedent basis for this limitation in the claim. Examiner notes independent claim 22, from which these claims depend, recite a "non-thermochromic printing ink."

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-9, 11, 13-14 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrist et al. US 4,111,322 in view of Kamata et la. US 5,431,697.

Obrist '322 teaches a synthetic plastic cap (1) applied to a container (4), and comprising printing (9). In col. 2, lines 50-51, Obrist '322 teaches the cap "is secured by screw threading (not shown)." Obrist '322 does not teach forming the cap of plastic with admixed thermochromic materials.

Kamata '697 teaches a polymer resin comprising admixed thermochromic materials which displays a change in color with respect to temperature change, and discloses in col. 8 lines 55-57, "The resultant article can have a sophisticated, highly fashionable appearance." In col. 3, lines 12-62, Kamata '697 discloses the various olefin polymers, such as high and low density polyethylene and propylene and combinations thereof. Furthermore, Kamata '697 teaches, in each of the 5 examples, molding various plastic objects of the new polymer. Example 1 teaches a bath pail; example 2 teaches a cup; example 3

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teaches a water bottle; example 4 teaches a tooth brush handle; example 5 teaches a sheet.

Furthermore, the examples teach varying the color transition temperature threshold. Example 2 teaches turning from colorless to blue at 10 degrees C, meeting the most narrow claimed temperature range in claim 3. Example 3 teaches a 35% weight degree of crosslink. Example 3 further teaches a color transition from white to deep blue.

Because Kamata '697 teaches forming various plastic articles from the material, and furthermore configuring the transition temperature, and display colors, forming the cap of Obrist '322 of the material disclosed by Kamata '697 is not found to be an unexpected result beyond ordinary experimentation, and would be well within ordinary skill.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the plastic closure cap of Obrist '322, forming it of the polymer taught by Kamata '697, motivated by the benefit of providing a sophisticated, highly fashionable appearance.

Examiner further notes that because Kamata '697 teaches varying the transition temperature, percent-weight composition ratios, and colors, varying all of these to a desired value or result are well within ordinary skill through routine experimentation. It has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Forming the cap of a mixture that would turn from white to deep blue, such as that taught by Example 3, motivated by the benefit of providing a sophisticated, highly fashionable cap, would result in the print being visible at a first temperature, and invisible at a second temperature. One would be motivated to make the cap switch from white to blue, to represent the colors of a particular logo, or trademark, for example.

Regarding claim 11, Obrist '322 teaches "Lemon Soda," which inherently comprises a carbonated beverage.

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5. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrist et al. US 4,111,322 in view of Kamata et al. US 5,431,697 as applied to claim 1 above, and further in view of Ohmi et al. US 5,769,255.

Obrist '322 is silent as to the sealing performance of the cap.

Ohmi '255 teaches a sealing liner insert (2) for threaded bottle caps, designed to promote "favorable sealing performance" (see Abstract).

It would have been obvious to one having ordinary skill in the art to provide Obrist '322 with the liner taught by Ohmi '255, motivated by the benefit of providing means to promote favorable sealing performance.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N Smalley whose telephone number is (703) 605-4670. The examiner can normally be reached on M-Th 9-7:30, Alternate Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (703) 308-2572. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jns



Stephen K. Cronin
Primary Examiner